

Amendment to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A method for treating gastroesophageal reflux disease, which comprises ~~administering to~~ implanting into the lower esophageal sphincter or the diaphragm of a mammal in need of such treatment a therapeutically effective tissue-bulking amount of microparticles, wherein the microparticles comprise a biocompatible, non-toxic hydrophilic copolymer, which comprises in copolymerized form about 25% to about 99% by weight of neutral hydrophilic acrylic monomer, about 2% to about 30% by weight of one or more monomers having a cationic charge, and about 1% to about 30% by weight of a functionalized monomer microparticles, ~~said administration being into the walls of the lower esophageal sphincter or the diaphragm.~~

2. (Original) The method of claim 1, wherein the microparticles are cationic.

3. (Original) The method of claim 1, wherein the microparticles comprise a positive charge on their surface.

4. (Original) The method of claim 1, wherein said mammal is a human.

Claims 5. - 7. (Canceled).

8. (Original) The method of claim 1, wherein the microparticles are coated with or linked to at least one collagen or a derivative thereof, glucosaminoglycans, or a mixture thereof.

9. (Currently Amended) The method of claim 1, wherein the microparticles are ~~administered~~ implanted in a sterile and pyrogen-free injectable solution.

10. (Original) The method of claim 1, wherein the microparticles are spherical.
11. (Cancelled)
12. (Original) The method of claim 10, wherein said microparticles have diameters ranging from about 10 μm to about 1000 μm .
13. (Currently Amended) The method of claim 1, wherein said ~~administration~~ implantation is made via syringe, catheter, or combinations thereof.
14. (Currently Amended) The method of claim 1, wherein said microparticles comprise or are ~~administered~~ implanted with one or more of a therapeutic agent, an anti-inflammatory agent, an angiogenesis inhibitor, a ~~radio-active~~ radioactive element, and an antimitotic agent.
15. (Original) The method of claim 1, wherein the microparticles further comprise a cell adhesion promoter.
16. (Original) The method of claim 15, wherein said cell adhesion promoter is selected from the group consisting of fibronectin, laminin, chondronectin, entacin, epibolin, liver cell adhesion molecule, serum spreading factor, collagen, heparin sulfates, dermatan sulfates, chondroctin sulfates, glucosaminoglycans, and mixtures thereof.

Claims 17. - 18. (Canceled).

19. (Currently Amended) A method for treating gastroesophageal reflux disease, which comprises:
 - (a) preparing cationic microparticles which comprise a biocompatible, non-toxic and hydrophilic polymers copolymer, which comprises in copolymerized form about 25% to about 99% by weight of neutral hydrophilic acrylic monomer, about 2% to about 30% by weight of one or more monomers having a cationic charge, and about 1 to about 30% by weight of a functionalized monomer;

- (b) administering the resulting microparticles to a mammal by ~~injection~~
implantation into ~~walls of~~ a sphincter located where the esophagus meets the
stomach.

20. (Currently Amended) The method of claim ~~19~~ 22, wherein the ~~microparticles further~~
~~comprise~~ a cell adhesion promoter is selected from the group consisting of fibronectin,
laminin, chondronectin, entacin, epibolin, liver cell adhesion molecule, serum spreading
factor, collagen, heparin sulfates, dermatan sulfates, chondroctin sulfates,
glucosaminoglycans, and mixtures thereof.

21. (New) The method of claim 15, wherein the cell adhesion promoter is coated on the
microparticles.

22. (New) The method of claim 19, wherein the microparticles further comprise a cell
adhesion promoter.

23. (New) The method of claim 22, wherein the cell adhesion promoter is coated on the
microparticles.